

RDT&E BUDGET ITEM JUSTIFICATION SHEET (R-2 Exhibit)								DATE February 2002	
BUDGET ACTIVITY 05 - Engineering and Manufacturing Development				PE NUMBER AND TITLE 0207434F Link 16 Support and Sustainment					
COST (\$ in Thousands)	FY 2001 Actual	FY 2002 Estimate	FY 2003 Estimate	FY 2004 Estimate	FY 2005 Estimate	FY 2006 Estimate	FY 2007 Estimate	Cost to Complete	Total Cost
Total Program Element (PE) Cost	0	0	44,146	44,186	186,571	265,815	257,912	Continuing	TBD
5049 JINTACCS	0	0	5,726	5,803	19,913	18,191	33,266	Continuing	TBD
5050 TCL System Integration	0	0	23,469	23,471	151,766	232,726	209,765	Continuing	TBD
5051 Family of Interoperable Operational Pictures (FIOP)	0	0	14,951	14,912	14,892	14,898	14,881	Continuing	TBD
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0	0

In FY 2003:

- a. #655049, JINTACCS efforts will transfer from PE 0604779F, Tactical Data Link Interoperability, #652189, JINTACCS;
- b. #655050, TDL System Integration efforts will transfer from PE 0604754F, Tactical Data Link Integration, #654749, Link 16 System Integration; and
- c. #655051, Family of Interoperable Operational Pictures (FIOP) efforts will transfer from PE 0604754F, Tactical Data Link Integration, #654992, Family of Interoperable Operational Pictures (FIOP).

This will be done in order to consolidate tactical data link/Link 16 funding and manage tactical data links as an enterprise.

(U) **A. Mission Description**

Tactical Data Links (TDL) are used in a combat environment to exchange information such as messages, data, radar tracks, target information, platform status, imagery, and command assignments. TDLs provide interoperability, local and global connectivity, and situational awareness to the user when operating under rapidly changing operational conditions. TDLs are used by the Air Force, Army, Navy, and Marine Corps theater Command and Control (C2) elements, weapons platforms, and sensors. TDLs include but are not limited to: Link-16, Link-11, Situational Awareness Data Link (SADL), Variable Message Format (VMF), Enhanced Position Location Reporting System (EPLRS), and Common Data link (CDL).

Utilization of Link 16 in a joint environment requires the integration of terminals (e.g., Joint Tactical Information Distribution System (JTIDS) or Multifunction

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05 - Engineering and Manufacturing Development

PE NUMBER AND TITLE

0207434F Link 16 Support and Sustainment

(U) **A. Mission Description Continued**

Information Distribution System (MIDS)) into these host platforms, and interoperability of Link 16 nets across all deployed joint and allied platforms. The Tactical Data Links (TDL) System Program Office (SPO) performs several cross-platform activities to help ensure proper integration of Link 16 capabilities and interoperability of Link 16 nets. In addition, the SPO is supporting the integration of Link 16 into the Iceland Air Defense System (IADS) and has management responsibility for the Air Force's Air Defense System Integration (ADSI) systems. The Single Integrated Air Picture (SIAP) efforts will lead to the joint development of improvements to TDLs to better support the warfighter by ensuring that the air picture is composed of common, continual, unambiguous, tracks of all airborne objects. The Family of Interoperable Operational Pictures (FIOP) efforts ensure that the total air, sea, and land situational awareness picture is unified and provided to all forces operating within the TDL network.

The Joint Interoperability of Tactical Command and Control Systems (JINTACCS) Program ensures platform/system interoperability through the development and management of the joint/combined architecture, tactical information exchange requirements (IERs), interface definitions and protocols, platform/system implementations, employment concepts, and operating procedures. This includes the coordination of all TDL and USMTF message standards configuration management, platform/system interoperability assessments and interoperability certification testing.

(U) **B. Budget Activity Justification**

This program is in budget activity 5 (Engineering Manufacturing and Development) because it supports development, integration solutions, fielding, operational support activities, and support of special projects.

(U) **C. Program Change Summary (\$ in Thousands)**

	<u>FY 2001</u>	<u>FY 2002</u>	<u>FY 2003</u>	<u>Total Cost</u>
(U) Previous President's Budget			29,715	TBD
(U) Appropriated Value				
(U) Adjustments to Appropriated Value				
a. Congressional/General Reductions				
b. Small Business Innovative Research				
c. Omnibus or Other Above Threshold Reprogram				
d. Below Threshold Reprogram				
e. Rescissions				
(U) Adjustments to Budget Years Since FY 2002 PBR			14,431	
(U) Current Budget Submit/FY 2003 PBR			44,146	TBD

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<p>(U) <u>C. Program Change Summary (\$ in Thousands) Continued</u></p> <p>(U) <u>Significant Program Changes:</u></p>		

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BUDGET ACTIVITY 05 - Engineering and Manufacturing Development				PE NUMBER AND TITLE 0207434F Link 16 Support and Sustainment				PROJECT 5049	
COST (\$ in Thousands)	FY 2001 Actual	FY 2002 Estimate	FY 2003 Estimate	FY 2004 Estimate	FY 2005 Estimate	FY 2006 Estimate	FY 2007 Estimate	Cost to Complete	Total Cost
5049 JINTACCS	0	0	5,726	5,803	19,913	18,191	33,266	Continuing	TBD
<p>In FY 2003, #655049, JINTACCS efforts transferred from PE 0604779F, Tactical Data Link Interoperability, #652189, JINTACCS.</p> <p>(U) <u>A. Mission Description</u></p> <p>The Joint Interoperability of Tactical Command and Control Systems (JINTACCS) Program is a Joint Staff directed program that provides the sole Air Force (AF) activity responsible for ensuring the interoperability of AF Tactical Data Links (TDLs) [including, but not limited to Tactical Digital Information Links (TADILs) and Variable Message Formats (VMF)] and United States Message Text Format (USMTF) systems with the associated Joint and allied/coalition systems. The requirements for the program are delineated in DoDD 4630.5, DoDD 4630.8, CJCSI 6212.01B, and AFI 33-108. The program ensures platform/system interoperability through the development and management of the joint/combined architecture, tactical information exchange requirements (IERs), interface definitions and protocols, platform/system implementations, employment concepts, and operating procedures. This includes the coordination of all TDL and USMTF message standards configuration management, platform/system interoperability assessments and interoperability certification testing. Air Force platforms/systems participating in, and affected by, this program include: Airborne Warning and Control System (AWACS); Airborne Battlefield Command and Control Center (ABCCC); Modular Control Element (MCE); Air Operations Center (AOC); Joint Surveillance Target Attack Radar System (JSTARS); F-15 A/B/C/D/E; F-16 B30/40/50; F-22; A/OA-10; Joint Strike Fighter (JSF); Airborne Laser (ABL); B-1; B-2; B-52; F-117; RC-135; Regional/Sector Air Operations Center (RAOC/SAOC), Command & Control Information Processing System (C2IPS); Space Based Infrared System (SBIRS); Iceland Air Defense System (IADS); Air Support Operations Center (ASOC); and Tactical Air Control Parties (TACPs), Theater Battle Management Corps System (TBMCS), Contingency Automated Theater Automated Planning System (CTAPS), Combat Intelligence System (CIS), Air Defense System Integrator (ADSI), Distributed Common Ground System (DCGS), North American Aerospace Defense Command (NORAD)/United States Space Command (USSPACECOM) Warfighting Support System (N/UWSS), Region/Sector Air Operations Center (R/SAOC) AWACS Digital Information Link, and Global Command and Control System (GCCS)-Air Force (GCSS-AF). The Air Force JINTACCS program supports the Assistant Secretary of Defense (ASD) directive on harmonization of US and NATO messages (e.g., ATO and ACO).</p> <p>(U) <u>FY 2001 (\$ in Thousands)</u></p> <p>(U) \$0 No Activity</p> <p>(U) \$0 Total</p>									
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BUDGET ACTIVITY 05 - Engineering and Manufacturing Development	PE NUMBER AND TITLE 0207434F Link 16 Support and Sustainment	
		PROJECT 5049

(U) **A. Mission Description Continued**

(U) FY 2002 (\$ in Thousands)

(U) \$0 No Activity

(U) \$0 Total

(U) FY 2003 (\$ in Thousands)

(U) \$660 Continue Interoperability Certification Testing. Specific platforms will be determined based on Link 16 message implementation, software upgrade, and system modification

(U) \$1,552 Continue US Message Text Formats Management and Updates
 - Support Joint, Allied/Coalition meetings and working groups
 - Support technology maturation for joint standards and DoD policy

(U) \$3,514 Continue Tactical Data Link Management and Architecture Development.
 - Support multi TADIL and VMF meetings and working groups
 - Consultations regarding implementation and interoperability with the F-16, B-52, B-1, B-2, F-117
 - Consultations regarding software updates and interoperability with the F-15C, E-3, E-8, ABCCC, CRC/CRE, TULIP

(U) \$5,726 Total

(U) **B. Project Change Summary**
 In FY 2003, #655049, JINTACCS efforts transferred from PE 0604779F, Tactical Data Link Interoperability, #652189, JINTACCS

(U) **C. Other Program Funding Summary (\$ in Thousands)**

	<u>FY 2001</u>	<u>FY 2002</u>	<u>FY 2003</u>	<u>FY 2004</u>	<u>FY 2005</u>	<u>FY 2006</u>	<u>FY 2007</u>	<u>Cost to</u>	<u>Total Cost</u>
	<u>Actual</u>	<u>Estimate</u>	<u>Estimate</u>	<u>Estimate</u>	<u>Estimate</u>	<u>Estimate</u>	<u>Estimate</u>	<u>Complete</u>	
(U) AF RDT&E									
(U) Other APPN									

(U) **D. Acquisition Strategy**
 As the Air Force lead agent for a jointly directed program, JINTACCS provides level of effort technical support for increasing interoperability of AF programs through message text and data link standards implementation.

(U) **E. Schedule Profile**

	<u>FY 2001</u>	<u>FY 2002</u>	<u>FY 2003</u>
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BUDGET ACTIVITY					PE NUMBER AND TITLE					PROJECT	
05 - Engineering and Manufacturing Development					0207434F Link 16 Support and Sustainment					5049	
(U) <u>E. Schedule Profile Continued</u>											
					<u>FY 2001</u>			<u>FY 2002</u>		<u>FY 2003</u>	
				1	2	3	4	1	2	3	4
(U)	F-16 - OFP M-3 baseline implementation and interoperability			X							
(U)	E-8 - Complete ASU Spiral 1 Implementation/Interoperability			X							
(U)	AOC - Complete baseline Implementation/Interoperability			X							
(U)	F-15C - Interoperability consultation for Software upgrades.			X							
(U)	F-16 - Interoperability consultation for Software upgrades.			X							
(U)	E-3 - Interoperability consultation for Software upgrades.			X							
(U)	E-8 - Interoperability consultation for Software upgrades.			X							
(U)	ABCCC - Interoperability consultation for Software upgrades.			X							
(U)	CRC/CRE - Interoperability consultation for Software upgrades.			X							
(U)	AOC - Interoperability consultation for Software upgrades.			X							
(U)	F-15E - Interoperability consultation for Software upgrades.			X							
(U)	ABL - Interoperability consultation for Software upgrades.			X							
(U)	B-1 - Interoperability consultation for Software upgrades.			X							
(U)	B-2 - Interoperability consultation for Software upgrades.			X							
(U)	B-52 - Interoperability consultation for Software upgrades.										X
(U)	F-22 - Interoperability consultation for Software upgrades.										X
(U)	F-117 - Interoperability consultation for Software upgrades.										X
(U)	Joint StrikeFighter (JSF) - Interoperability consultation for Software								X		
(U)	R/SAOC - Interoperability consultation for Software upgrades.						X				
(U)	IADS - Interoperability consultation for Software upgrades.								X		
(U)	TACP/ASOC - Interoperability consultation for Software upgrades.								X		
(U)	Interoperability Certification Testing			X							
(U)	(Passed Joint and CAF Interoperability)										X
(U)	- MCE P3I										
(U)	CAF								X		
(U)	JOINT									X	
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(U) <u>E. Schedule Profile Continued</u>													
		<u>FY 2001</u>				<u>FY 2002</u>				<u>FY 2003</u>			
		1	2	3	4	1	2	3	4	1	2	3	4
(U)	- JSTARS												
(U)	CAF								X				
(U)	JOINT							X					
(U)	- E-3 AWACS			X									
(U)	CAF					X							
(U)	JOINT						X						
(U)	- F-15C	X											
(U)	CAF				X								
(U)	JOINT				X								
(U)	- F-15E	X											
(U)	CAF				X								
(U)	JOINT							X					
(U)	- IADS					X							
(U)	CAF							X					
(U)	JOINT					X							
(U)	-ABCCC			X									
(U)	CAF				X								
(U)	JOINT						X						
(U)	- RADIL			X									
(U)	CAF				X								
(U)	JOINT						X						
(U)	- ABL										X		
(U)	CAF								X				
(U)	JOINT										X		
(U)	- F-16					X							
(U)	CAF							X					
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BUDGET ACTIVITY					PE NUMBER AND TITLE					PROJECT		
05 - Engineering and Manufacturing Development					0207434F Link 16 Support and Sustainment					5049		
(U) <u>E. Schedule Profile Continued</u>												
					<u>FY 2001</u>				<u>FY 2002</u>			
					1	2	3	4	1	2	3	4
(U)	JOINT								X			
(U)	- TACP								X			
(U)	CAF									X		
(U)	JOINT										X	
(U)	- ADSI							X				
(U)	CAF							X				
(U)	JOINT										X	
(U)	OPFAC INSTALL/INTEGRATION									X		
(U)	- F-15 E COMPLETE								X			
* Denotes completed event												
X Denotes planned event												

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RDT&E PROGRAM ELEMENT/PROJECT COST BREAKDOWN (R-3)								DATE February 2002		
BUDGET ACTIVITY					PE NUMBER AND TITLE				PROJECT	
05 - Engineering and Manufacturing Development					0207434F Link 16 Support and Sustainment				5049	
(U) <u>A. Project Cost Breakdown (\$ in Thousands)</u>										
					<u>FY 2001</u>		<u>FY 2002</u>		<u>FY 2003</u>	
(U) Interoperability Certification Testing									660	
(U) US Message Text Formats Management									1,552	
(U) Tactical Data Links Management									3,514	
(U) Total									5,726	
(U) <u>B. Budget Acquisition History and Planning Information (\$ in Thousands)</u>										
(U) <u>Performing Organizations:</u>										
<u>Contractor or</u>		<u>Contract</u>								
<u>Government</u>		<u>Method/Type</u>		<u>Award or</u>		<u>Performing</u>		<u>Project</u>		
<u>Performing</u>		<u>or Funding</u>		<u>Obligation</u>		<u>Activity</u>		<u>Office</u>		<u>Total Prior</u>
<u>Activity</u>		<u>Vehicle</u>		<u>Date</u>		<u>EAC</u>		<u>EAC</u>		<u>to FY 2001</u>
										<u>Budget</u>
										<u>Budget</u>
										<u>Budget</u>
										<u>Budget to</u>
										<u>Complete</u>
										<u>Total</u>
										<u>Program</u>
<u>Product Development Organizations</u>										
<u>Support and Management Organizations</u>										
MITRE		CPAF		OCT 72				3,011		Continuing
B3H		CPFF		MAY 97				1,925		Continuing
COMPTEK		CPAF		OCT 92				0		0
HTI		CPAF		OCT 94				0		0
PGM OFFICE		Various		Various				340		Continuing
AF Participating Test Unit		PO/616		OCT 97				450		Continuing
(PTU)										
<u>Test and Evaluation Organizations</u>										
					<u>Total Prior</u>		<u>Budget</u>		<u>Budget</u>	
					<u>to FY 2001</u>		<u>FY 2001</u>		<u>FY 2002</u>	
							<u>Budget</u>		<u>Budget</u>	
							<u>FY 2003</u>		<u>Budget to</u>	
									<u>Complete</u>	
									<u>Total</u>	
									<u>Program</u>	
<u>Subtotals</u>										
Subtotal Product Development										
Subtotal Support and Management										
Subtotal Test and Evaluation										
Total Project										
								5,726		TBD
								5,726		TBD
										TBD
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Exhibit R-3 (PE 0207434F)

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RDT&E BUDGET ITEM JUSTIFICATION SHEET (R-2A Exhibit)								DATE February 2002	
BUDGET ACTIVITY 05 - Engineering and Manufacturing Development				PE NUMBER AND TITLE 0207434F Link 16 Support and Sustainment				PROJECT 5050	
COST (\$ in Thousands)	FY 2001 Actual	FY 2002 Estimate	FY 2003 Estimate	FY 2004 Estimate	FY 2005 Estimate	FY 2006 Estimate	FY 2007 Estimate	Cost to Complete	Total Cost
5050 TCL System Integration	0	0	23,469	23,471	151,766	232,726	209,765	Continuing	TBD
<p>In FY03, #655050, TDL System Integration includes efforts transferred from PE 0604754F, Tactical Data Link Integration, #654749, Link 16 System Integration.</p> <p>(U) <u>A. Mission Description</u></p> <p>Tactical Data Links (TDLs) are used in a combat environment to exchange information such as messages, data, radar tracks, target information, platform status, imagery, and command assignments. TDLs provide interoperability, local and global connectivity, and situational awareness to the user when operating under rapidly changing operational conditions. TDLs are used by the Air Force, Army, Navy, and Marine Corps theater Command and Control (C2) elements, weapons platforms, and sensors. TDLs include but are not limited to: Link 16, Link 11, Situational Awareness Data Link (SADL), Variable Message Format (VMF), Enhanced Position Location Reporting System (EPLRS), and Common Data Link (CDL).</p> <p>The number of Air Force platforms hosting TDLs are expanding from C2 aircraft (E-3, E-8, etc.) into the fighter, bomber, sensor, tanker, airlift and other tactical fleets (F-15, F-16, F-22, RJ, ABCCC, B-1, B-2, B-52, etc.). Utilization of TDLs in a joint environment requires the integration of terminals into these host platforms and interoperability of TDL networks across all deployed joint and allied platforms. Cross-platform activities performed by the Tactical Data Links System Program Office (SPO) include: integration efforts encompassing hardware, software, operational, and logistics development, certification of individual TDL implementations to joint and allied standards, establishment of Service wide net management procedures and operations, system wide enhancements and improvements, and test and sustainment activities. In addition, the SPO is supporting the integration of TDL into the Iceland Air Defense System (IADS) and has management responsibility for the Air Force's Air Defense System Integrator (ADSI). The Single Integrated Air Picture (SIAP) efforts will lead to the joint development of near real-time and real-time data from multiple sensors and TDLs. This will enhance the air picture provided to the warfighter by ensuring a common, continual, and unambiguous, tracks of all airborne objects.</p> <p>(U) <u>FY 2001 (\$ in Thousands)</u></p> <p>(U) \$0 No Activity</p> <p>(U) \$0 Total</p> <p>(U) <u>FY 2002 (\$ in Thousands)</u></p> <p>(U) \$0 No Activity</p> <p>(U) \$0 Total</p> <p style="text-align: left;">Project 5050</p>									

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(U) **A. Mission Description Continued**

(U) FY 2003 (\$ in Thousands)

(U) \$5,812	CONTINUE LINK 16 INTEGRATION: Efforts associated with hardware and software integration of Link 16 terminals into Air Force platforms. -- (U) On-going engineering integration support to platforms; technical improvements; field support; technical assistance to related tactical data link demonstration programs.
(U) \$2,310	CONTINUE LINK 16 EMD SUPPORT: Efforts associated with fielding terminals. -- (U) Support Operations Support Working Group; maintain developmental equipment; test support; fielding/non-recurring training; network support; crypto support; spectrum support; gateway support; data link tool support.
(U) \$287	CONTINUED TACTICAL DATA LINK CONNECTIVITY: -- (U) Link 16/other TDLs/Gateways/Interfaces. -- (U) ADSI Management.
(U) \$247	CONTINUED SYSTEM TESTING & SUPPORT: Cross-platform test and evaluation and system level testing.
(U) \$14,813	CONTINUED SINGLE INTEGRATED AIR PICTURE LINKAGE: -- (U) Continued AF funding of Single Integrated Air Picture (SIAP) effort. -- (U) AF system engineering and infrastructure cost to support SIAP recommendations.
(U) \$23,469	Total

(U) **B. Project Change Summary**
Prior to FY03, funding for the SIAP effort is contained in PE 0603879N. Funding for the remaining TDL System Integration efforts is contained in PE 0604754F, Tactical Data Link Integration, #654749, Link 16 System Integration.

(U) **C. Other Program Funding Summary (\$ in Thousands)**

	<u>FY 2001</u> <u>Actual</u>	<u>FY 2002</u> <u>Estimate</u>	<u>FY 2003</u> <u>Estimate</u>	<u>FY 2004</u> <u>Estimate</u>	<u>FY 2005</u> <u>Estimate</u>	<u>FY 2006</u> <u>Estimate</u>	<u>FY 2007</u> <u>Estimate</u>	<u>Cost to</u> <u>Complete</u>	<u>Total Cost</u>
(U) AF RDT&E									
(U) Other APPN			6,291	8,185	8,111	8,389	8,560	Continuing	Continuing
(U) APPN 10, F-16 Link 16 (PE 27434)			36,563	27,962	22,434	22,784	20,476	Continuing	Continuing

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(U) **D. Acquisition Strategy**
 The Air Force Tactical Data Links System Program Office (SPO) provides for common development of integration and interoperability across all Air Force platforms and ensures that Link 16 is procured and maintained as a joint, end-to-end, command and control system. Host platforms program and budget for JTIDS or MIDS (Fighter Data Link (FDL) and Low Volume Terminal (LVT) derivatives) production terminals and for installation into operational units.

(U) **E. Schedule Profile**

	<u>FY 2001</u>				<u>FY 2002</u>				<u>FY 2003</u>			
	1	2	3	4	1	2	3	4	1	2	3	4
(U) Contract Milestones												
(U) - FDL Full Rate Production Award												
(U) - MIDS LVT - F-16 Production Award												
(U) Host Platform Integration Start												
(U) - F-16 (thru FY04)												
(U) - Compass Call (thru FY02)								X				
(U) - Airborne Laser (ABL) (thru FY03)										X		
(U) - B-2 EMD								X				
(U) Command and Control Platforms												
(U) - AWACS Link 16 Qual Complete				*								
(U) Complete Baseline Integration												
(U) - MCE (P3I)												
(U) - IADS installation start								X				

* Denotes completed events
 X Denotes planned events

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RDT&E PROGRAM ELEMENT/PROJECT COST BREAKDOWN (R-3)								DATE February 2002		
BUDGET ACTIVITY					PE NUMBER AND TITLE				PROJECT	
05 - Engineering and Manufacturing Development					0207434F Link 16 Support and Sustainment				5050	
(U) <u>A. Project Cost Breakdown (\$ in Thousands)</u>										
					<u>FY 2001</u>		<u>FY 2002</u>		<u>FY 2003</u>	
(U) Link 16 Integration									5,812	
(U) EMD Activities									2,310	
(U) Tactical Data Link Connectivity									287	
(U) System Testing and Support									247	
(U) Single Integrated Air Picture									14,813	
(U) Total									23,469	
(U) <u>B. Budget Acquisition History and Planning Information (\$ in Thousands)</u>										
(U) <u>Performing Organizations:</u>										
<u>Contractor or</u>		<u>Contract</u>								
<u>Government</u>		<u>Method/Type</u>		<u>Award or</u>		<u>Performing</u>		<u>Project</u>		
<u>Performing</u>		<u>or Funding</u>		<u>Obligation</u>		<u>Activity</u>		<u>Office</u>		<u>Total Prior</u>
<u>Activity</u>		<u>Vehicle</u>		<u>Date</u>		<u>EAC</u>		<u>EAC</u>		<u>to FY 2001</u>
<u>Product Development Organizations</u>								<u>Budget</u>		<u>Budget</u>
Data Link Solutions		MIPR		TBD				<u>FY 2001</u>		<u>FY 2002</u>
<u>Support and Management Organizations</u>								<u>FY 2003</u>		<u>Budget to</u>
ESC		Various		Various				<u>FY 2003</u>		<u>Complete</u>
Contractor Support								669		Continuing
MITRE								432		Continuing
Single Integrated Air Picture		Various		TBD				3,006		Continuing
<u>Test and Evaluation Organizations</u>								4,228		Continuing
Eglin AFB		PO/616		Various				14,813		Continuing
								321		Continuing
										TBD
Project 5050										
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RDT&E PROGRAM ELEMENT/PROJECT COST BREAKDOWN (R-3)					DATE February 2002	
BUDGET ACTIVITY		PE NUMBER AND TITLE			PROJECT	
05 - Engineering and Manufacturing Development		0207434F Link 16 Support and Sustainment			5050	
		<u>Total Prior</u>	<u>Budget</u>	<u>Budget</u>	<u>Budget</u>	<u>Total</u>
		<u>to FY 2001</u>	<u>FY 2001</u>	<u>FY 2002</u>	<u>FY 2003</u>	<u>Program</u>
<u>Subtotals</u>						
Subtotal Product Development					669	TBD
Subtotal Support and Management					22,479	TBD
Subtotal Test and Evaluation					321	TBD
Total Project					23,469	TBD

Project 5050

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RDT&E BUDGET ITEM JUSTIFICATION SHEET (R-2A Exhibit)								DATE February 2002	
BUDGET ACTIVITY 05 - Engineering and Manufacturing Development				PE NUMBER AND TITLE 0207434F Link 16 Support and Sustainment				PROJECT 5051	
COST (\$ in Thousands)	FY 2001 Actual	FY 2002 Estimate	FY 2003 Estimate	FY 2004 Estimate	FY 2005 Estimate	FY 2006 Estimate	FY 2007 Estimate	Cost to Complete	Total Cost
5051 Family of Interoperable Operational Pictures (FIOP)	0	0	14,951	14,912	14,892	14,898	14,881	Continuing	TBD
<p>In FY03, #655051, Family of Interoperable Operational Pictures (FIOP) efforts transferred from PE 0604754F, Tactical Data Link Integration, #654992, Family of Interoperable Operational Pictures (FIOP), in order to consolidate the three Link 16 infrastructure PEs into one and manage tactical data links as an enterprise.</p> <p>(U) <u>A. Mission Description</u> This funding and schedule will support development, integration, operational fielding and migration of capability to identified systems of record for the Family of Interoperable Operational Pictures (FIOP) initiative. The objective is to 'provide an all-source picture of the battle space containing actionable, decision-quality, information to the warfighter through a fusion of existing databases' Stove-piped systems will be identified and 'linked' via an improved web-enabled Common Operational Picture (COP).</p> <p>(U) <u>FY 2001 (\$ in Thousands)</u> (U) \$0 No Activity (U) \$0 Total</p> <p>(U) <u>FY 2002 (\$ in Thousands)</u> (U) \$0 No Activity (U) \$0 Total</p> <p>(U) <u>FY 2003 (\$ in Thousands)</u> (U) \$2,200 REQUIREMENTS & ENGINEERING MANAGEMENT: --(U) Provide requirement management (\$300K x 4 services: \$1,200K), AF Exec Agent (\$400K), and DISA Mgt (\$600K). (U) \$7,275 IMPLEMENTATION OF EXECUTION MANAGEMENT CAPABILITY: --(U) Provide integration support, execution management, and visualization capabilities. (U) \$2,889 TACTICAL COE WORKSTATION DEVELOPMENT: --(U) Migrate USMC/USA C2PC to COP infrastructure. Provide integration support, engineering, hardware/software, and travel. (U) \$2,587 COE SUPPORT FOR JOINT VARIABLE MSG FORMAT: --(U) Implement COE processing of JVMF messages among USMC/USN/USA with scalable COP infrastructure in limited bandwidth environments. Provide integration support, engineering, hardware/software, and travel</p>									
Project 5051			Page 15 of 18 Pages				Exhibit R-2A (PE 0207434F)		

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RDT&E BUDGET ITEM JUSTIFICATION SHEET (R-2A Exhibit)		DATE February 2002
BUDGET ACTIVITY 05 - Engineering and Manufacturing Development	PE NUMBER AND TITLE 0207434F Link 16 Support and Sustainment	
		PROJECT 5051

(U) **A. Mission Description Continued**

(U) FY 2003 (\$ in Thousands) Continued

(U) \$14,951 Total

(U) **B. Project Change Summary**

This funding profile and schedule reflects received program scope. Also, prior to FY03, funding for the FIOP effort is contained in PE 0604754F, Tactical Data Link Integration, #654992, Family of Interoperable Operational Pictures (FIOP).

(U) **C. Other Program Funding Summary (\$ in Thousands)**

	<u>FY 2001</u>	<u>FY 2002</u>	<u>FY 2003</u>	<u>FY 2004</u>	<u>FY 2005</u>	<u>FY 2006</u>	<u>FY 2007</u>	<u>Cost to</u>	<u>Total Cost</u>
	<u>Actual</u>	<u>Estimate</u>	<u>Estimate</u>	<u>Estimate</u>	<u>Estimate</u>	<u>Estimate</u>	<u>Estimate</u>	<u>Complete</u>	
(U) AF RDT&E									
(U) Other APPN									

(U) **D. Acquisition Strategy**

Implement spiral develop, integration and sustain web-enabled COP capabilities that are interoperable with existing Service systems. Identify execution-level requirements and candidate solutions, evaluate those potential solutions against the stated requirements, and develop COE based, spiral developed capabilities in 6 month increments. FIOP developed capabilities will be tested and evaluated for operational utility in Service test facilities and at operational locations. FIOP capabilities will then be migrated to Service SOR systems for sustainment.

(U) **E. Schedule Profile**

	<u>FY 2001</u>				<u>FY 2002</u>				<u>FY 2003</u>			
	1	2	3	4	1	2	3	4	1	2	3	4
(U) Rqmts/Engr Management												
(U) Execution Management Capability												
(U) Tactical COE Workstation Development												
(U) COE Support for Joint VMF												

* Denotes completed event
X Denotes planned event

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RDT&E PROGRAM ELEMENT/PROJECT COST BREAKDOWN (R-3)								DATE February 2002			
BUDGET ACTIVITY					PE NUMBER AND TITLE					PROJECT	
05 - Engineering and Manufacturing Development					0207434F Link 16 Support and Sustainment					5051	
(U) <u>A. Project Cost Breakdown (\$ in Thousands)</u>											
					<u>FY 2001</u>		<u>FY 2002</u>		<u>FY 2003</u>		
(U) REQUIREMENTS & ENGINEERING MANAGEMENT									2,200		
(U) EXECUTION MANAGEMENT CAPABILITY									7,275		
(U) TACTICAL COE WORKSTATION DEVELOPMENT									2,889		
(U) COE SUPPORT FOR JOINT VARIABLE MESSAGE FORMAT									2,587		
(U) Total									14,951		
(U) <u>B. Budget Acquisition History and Planning Information (\$ in Thousands)</u>											
(U) <u>Performing Organizations:</u>											
<u>Contractor or</u>		<u>Contract</u>									
<u>Government</u>		<u>Method/Type</u>		<u>Award or</u>		<u>Performing</u>		<u>Project</u>			
<u>Performing</u>		<u>or Funding</u>		<u>Obligation</u>		<u>Activity</u>		<u>Office</u>		<u>Total Prior</u>	
<u>Activity</u>		<u>Vehicle</u>		<u>Date</u>		<u>EAC</u>		<u>EAC</u>		<u>to FY 2001</u>	
<u>Product Development Organizations</u>								<u>Budget</u>		<u>Budget</u>	
Execution Management		TBD		TBD						<u>FY 2001</u>	
Contractor										<u>FY 2002</u>	
Tactical Coe WS Contractor		TBD		TBD						<u>FY 2003</u>	
JVMF Contractor		TBD		TBD						<u>Budget to</u>	
<u>Support and Management Organizations</u>										<u>Complete</u>	
Multi-Service Contractor		Various		Various						<u>Total</u>	
Support										<u>Program</u>	
MITRE		FPLOE		Various						6,877	
<u>Test and Evaluation Organizations</u>										Continuing	
										TBD	
										2,730	
										Continuing	
										TBD	
										2,480	
										Continuing	
										TBD	
										2,364	
										Continuing	
										TBD	
										500	
										Continuing	
										TBD	

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RDT&E PROGRAM ELEMENT/PROJECT COST BREAKDOWN (R-3)					DATE February 2002	
BUDGET ACTIVITY		PE NUMBER AND TITLE			PROJECT	
05 - Engineering and Manufacturing Development		0207434F Link 16 Support and Sustainment			5051	
		<u>Total Prior</u>	<u>Budget</u>	<u>Budget</u>	<u>Budget</u>	<u>Budget to</u>
		<u>to FY 2001</u>	<u>FY 2001</u>	<u>FY 2002</u>	<u>FY 2003</u>	<u>Complete</u>
						<u>Total</u>
<u>Subtotals</u>						
Subtotal Product Development					12,087	TBD
Subtotal Support and Management					2,864	TBD
Subtotal Test and Evaluation						
Total Project					14,951	TBD

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